Remarks

I. Status of Claims

Claims 1-24 are pending in the present application and 23 and 24 have been examined. Claims 23 stands rejected under 35 U.S.C. §102(b) as anticipated by Earl et al. (U.S. Patent No. 5,173,489) and claim 24 stands rejected under 35 U.S.C. §102(b) as anticipated by the Dailey et al. journal article in light of the Rundfeldt et al. journal article.

Claims 23 and 24 have been amended. Support for the amendments to claim 23 is found throughout the specification as filed, for example on page 3, lines 18-25 and in Example 7, beginning on page 19, line 25 and continuing through page 20, line 23, as well as in claim 1. Support for the amendments to claim 24 is also found throughout the specification as filed, for example on page 3, lines 18-25 and in Example 7, beginning on page 19, line 25 and continuing through page 20, line 23, as well as in claim 1.

Claims 1-22 have been canceled.

II. The Restriction Requirement

Although applicants do not agree with the Patent Office's analysis and treatment of the Restriction Requirement, applicants have cancelled claims 1-22 as drawn to non-elected inventions. Applicants retain the right to file one or more divisional applications directed to non-elected subject matter.

III. Response to the Objections to the Specification

III.A. The Priority Statement

The Patent Office states "[I]f applicant desires priority under 35 USC 119(e) based on a previously filed copending application, specification reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph." *Official Action*, page 2.

Applicants have amended the specification accordingly.

III.B. The Brief Description of the Drawings

The Patent Office states "[t]he 'Brief Description of the Figures' section of the instant application is missing its heading and the description for Figures 1-4 must include a description for each of the individual panels found in the figures." *Official Action*, page 2.

Applicants have amended the specification accordingly.

IV. Response to the Objection to the Claims

The Patent Office states "[c]laims 23-24 are objected to as being dependent upon a non-elected claim (claim 1)."

Applicants have amended claims 23 and 24 to independent form by incorporating the elements of claim 1.

V. Response to the Rejection of Claim 23 Under 35 U.S.C. §102(b)

The Patent Office has rejected claim 23 under 35 U.S.C. §102(b) as anticipated by US Patent No. 5,173,489 to Earl et al. (hereinafter "the '489 Patent"). The Patent Office contends "Earl discloses linopirdine . . . and methods of treating neurological or neurodegenerative disorders such as Alzheimer's disease by administering linopridine. The use of linopridine has the inherent property of acting as an antagonist to KCNQ2 /KCNQ3 channels as taught by the instant disclosure and meets all the limitations of claims 1 and 23 because the use of linopirdine would inherently meet the assay limitations of claim 1 as taught by the instant disclosure." *Official Action*, page 3. Applicants traverse the rejection and submit the following comments.

Initially, applicants note "[a] prior art reference anticipates a patent claim if the reference discloses, either expressly or inherently, all of the limitations of the claim." *Verdegaal Bros., Inc. v. Union Oil Col. Of Cal.*, 814 F.2d 628 (Fed. Cir. 1987). However, a reference can only "anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference." *Schering Corp., v. Geneva Pharmaceuticals*, 2003 WL 21767852 (Fed. Cir.).

Applicants have amended claim 23 to recite the element that the compound is identified by contacting the compound with a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides. Support for this amendment is found throughout the specification as filed, notably

on page 3, lines 18-25 and in Example 7, beginning on page 19, line 25 and continuing through page 20, line 23.

Amended claim 23 recites the element that the compound be identified by contacting a compound with a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides, wherein the KCNQ2 and the KCNQ3 form a potassium channel; and measuring the activity of the potassium channel. The identified compound is then administered to a subject in need thereof.

The '489 patent does not disclose a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides. In fact, the '489 patent does not disclose any cell lines at all, and instead employs live rats or rat brain slices in characterization studies. Thus, unlike the present invention, the use of the compound described in the '489 patent was not identified by employing a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides. This element of the present invention is lacking from the cited reference.

Since the '489 patent does not disclose each and every limitation of amended claim 23 explicitly or inherently, it cannot anticipate claim 23. In view of the amendments to claim 23 and the remarks above, applicants request the rejection of claim 23 under 35 U.S.C. §102(b) be withdrawn. Applicants further submit claim 23 is in condition for allowance and respectfully request the same.

VI. Response to the Rejection of Claim 24 under 35 U.S.C. §102(b)

The Patent Office has rejected claim 24 under 35 USC 102(b) as anticipated by the Dailey et al. journal article (Dailey et al., (1995) *Neurosci. Lett.* 195:77-80; hereinafter "Dailey et al.") in light of the Rundsfeldt et al. journal article (Rundsfeldt et al., (2000) *Neurosci. Lett.* 282:73-76; hereinafter "Rundsfeldt et al."). The Patent Office contends "Dailey discloses methods of treating epilepsy-prone rats with . . .the anticonvuslant retigabine. Retigabine has the inherent property of acting as an agonist to KCNQ2/KCNQ3 channels as shown by Rundfeldt (abstract). Retigabine meets all the limitations of claims 1 and 24 because the use of retigabine would inherently meet the assay limitations of claim 1 as taught by Rundfeldt." *Official Action*, pages 3-4. Applicants traverse the rejection and submit the following comments.

Applicants have amended claim 24 to recite the element that the compound is identified by contacting the compound with a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides. Support for this amendment is found throughout the specification as filed, notably on page 3, lines 18-25 and in Example 7, beginning on page 19, line 25 and continuing through page 20, line 23.

Dailey et al. do not disclose a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides. Dailey et al. recites the use of epilepsy-prone rats, but do not disclose any relationship of retigabine to KCNQ2 or KCNQ3. Notably, Dailey et al. do no recite identifying retigabine or any other compound by employing a transfected cell that stably coexpresses KCNQ2 and KCNQ3 polypeptides. This element of the present invention is lacking from the cited reference.

Although Rundsfeldt et al. was not cited, applicants note that Rundsfeldt et al. is of no help in this regard, since Rundsfeldt et al. recites transiently transfected cells to express KCNQ2 and KCNQ3.

Since Dailey et al. does not disclose each and every limitation of claim 24 explicitly or inherently, it cannot anticipate claim 24. In view of the amendments to claim 24 and the remarks above, applicants request the rejection of claim 24 under 35 U.S.C. §102(b) be withdrawn. Applicants further submit claim 24 is in condition for allowance and respectfully request the same.

VII. Conclusions

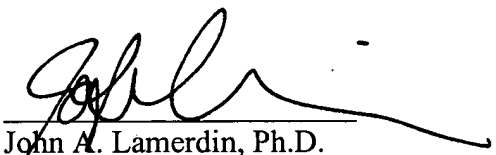
In light of the above amendments and remarks, applicants respectfully submit that the subject patent application is now in condition for allowance and courteously solicit a Notice of Allowance.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

Although it is believed no additional fee is due, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment associated with the filing of this

correspondence to Deposit Account Number 19-3880 in the name of Bristol-Myers Squibb Company.

Respectfully submitted,



John A. Lamerdin, Ph.D.
Attorney for Applicants
Reg. No. 44,858

Bristol-Myers Squibb Company
Patent Department
P.O. Box 4000
Princeton, NJ 08543-4000
609-252-3575

Date: August 12, 2003